

Software Evaluation Guide

*Configurator-based Guided Selling and Quoting
Solutions for Manufacturers of Complex Products*



Introduction

If you are like many manufacturers of complex products such as equipment, machinery, instruments, or specialty vehicles, you may be finding that the tools you currently use to configure, quote, and sell your products are no longer adequate in today's competitive market. Common problems include: difficulty in maintaining product configuration and pricing rules; poor integration between systems; inability to deploy tools over the Internet to support your sales channel, etc.

This paper is intended to help you select a guided selling and quoting solution that will address these and other problems and give your company a distinct edge over the competition.

The Theory

As a manufacturer of complex products you have probably developed a number of tools to help sales people configure, price, quote, propose, and order your products. Those tools likely consist of sales manuals, spreadsheets, and computer systems assembled over the course of several years. They may be used by your channel partners such as dealers or distributors as well as your own sales people.

In theory, these tools should make the process of matching your products to customer needs a straightforward exercise, leaving your sales people plenty of time to 'sell' and your engineering department plenty of time to develop new products.

The Reality

But if you are like many manufacturers, the reality may be that you still have challenges. Ask yourself:

- **Are the tools your sales people actually have inadequate or disjointed**, leaving them with the need to frequently ask other people for help, and forcing them to develop manual processes of their own that are inefficient, ineffective, inconsistent, and/or prone to error?
- **Are you losing sales you should have won** because the quoting process takes too long; or because your proposals often lack information your customer needs?
- **Are configurations and quotes often inaccurate** because sales people sometimes use an out of date table or spreadsheet to configure or price a product (even though you invest a lot of time and effort – and therefore cost – trying to keep tools up-to-date)?
- **Are your valuable sales engineering (or design engineering) resources constantly being called upon** to help sales people with what should be routine requests, leaving insufficient time for the truly special cases they should be handling?

Guided Selling

Guided selling is a process by which computer-based tools utilizing product knowledge captured in electronic format 'guide' sales people, channel partners, or end customers through the selection, configuration, and pricing of products to develop a quote or place an order.

The process may also include generation of configuration-specific and order-specific drawings, documents, and information for use by the customer or the manufacturer's production process.

Guided selling is applicable to products that are assembled to order (ATO), Configured-to-Order (CTO), Made-to-Order (MTO), or partially Engineered-to-Order (ETO).

- **Do you have a hard time keeping in-house developed computer systems up to date?** And do you worry that the programmer who does so is the only person that really knows how they work?
- **Do you have customers that are unhappy about frequent order problems** that delay delivery or, worse yet, result in problems with the delivered product? Or... have you put some form of 'order checkers' in place to avoid that, but in doing so added additional time and cost to your ordering process?
- **Does it take too long to train new sales reps or dealers** on how to sell your products? And do skill levels vary widely across your sales force?
- **Are you 'leaving money on the table'** because your sales people are inconsistent in making cross-sell or up-sell suggestions?
- **Is the hand-off between sales and manufacturing disjointed**, with drawings and technical specifications having to be re-created multiple times, and with poor integration to key business systems?
- **Are you having a hard time keeping up with competitors** who are deploying new tools via the Internet and other means to become "easy to do business with"?

Resulting Strategic Concerns

If any of these realities sound like your situation, you may also be concerned about bigger issues:

- **Is your profitability suffering** because of lost revenue and/or the added cost of non value-added activities required to support your sales effort?
- **Will your company be able to continue to perform well** in ever more competitive markets?
- **Will you be able to grow your sales force at a sufficient rate** to meet company growth objectives without substantially increasing the cost of selling?
- **Will you be able to attract the best channel partners** if you are seen as "difficult to do business with"?
- **What will happen if you lose any of the key people with important product knowledge "in their heads"** to retirement or the competition, leaving you with little or no ability to deal with certain product issues?
- **Will you be able to quickly launch the selling process for new products** your company has on the drawing boards?

IT Issues

If you have already considered the possibility of applying Information Technologies (IT) to help address these challenges, you may feel you have some difficult hurdles to get over in order to do so. For instance:

- **Your in-house IT people are probably over-worked as it is**, and it's unlikely they could take on a significant new software development project. It doesn't make sense for them to become a 'software developer' in today's world anyway.

- ***There may be no way your company is ready to completely replace existing business, manufacturing, or engineering systems*** – even if it would improve the selling process. At the same time, any new selling system needs to be well integrated with key business systems such as ERP and CRM, and possibly with your engineering systems, in order to be truly effective.
- ***You wonder if there is anyone out there*** who has the tools, skills, and experience to help your company overcome these issues and implement an effective solution.

Guided Selling Solutions

Fortunately, there is a type of packaged software available today that is usually referred to as ‘Guided Selling’ or ‘Guided Quoting’ solutions. These solutions are generally built around a product configurator and related tools and are designed to “guide” sales people through the major phases of the process for selling complex products. The best of these tools provide the capabilities to:

- ***Capture the knowledge (information, rules, formulas, etc.) of your product experts*** and make it available to everyone.
- ***Use this captured knowledge to intuitively guide your sales people*** through a step-by-step process to:
 - Identify the product, model, or part that best fits the customer’s needs based on key usage, environmental, and performance criteria.
 - Configure the detail features, options, and dimensions that will best customize the product to the customer’s specific needs, ensuring that the configured product is valid and can be manufactured.
 - Accurately price the product based on its detail configuration as well as various factors related to product, geography, customer, promotions, dealer discount or mark-up, etc.
 - Possibly suggest a higher performance product the customer may want to consider, or related products such as accessories, service parts, warranty, etc. the customer might want to purchase at the same time.
 - Generate and assemble a comprehensive proposal or bid package that includes all of the essential contents such as configuration-driven images, drawings, and CAD models, along with the proper legal, warranty, and descriptive documents.
- ***Convert a quote into an order*** and transfer it to your company’s order processing system, and possibly generate manufacturing information such as a BOM and routing for transfer to your company’s manufacturing system.

Also most Guided Selling software solutions are built to integrate with existing business and engineering systems, which is good news in terms of keeping the impact on your company IT environment to a minimum.

A Big Impact on Your Sales and Profitability

A good Guided Selling system can have a big impact on your profitability. Experts such as Gartner Group and others say that effective product configurator-based tools will typically:

- **Enhance revenues** through improved selling effectiveness
- **Reduce cost of sales**
- **Reduce order rework expenses** due to mis-configured orders.

In fact, many say that customer-facing tools such as a Guided Selling system can have more positive impact on profitability than most other business process enhancement projects a company might consider.

This Guide and How to Use it

Guided Selling software may be exactly the tool you need to take your selling process to the next level. This guide has been developed to help you organize and execute an evaluation process for a Guided Selling software solution. It should be a useful tool to help you:

- **Get your management team ‘on the same sheet of paper’** in terms of what you are looking for and why
- **Develop a checklist of key software and partner characteristics** to look for in an initial evaluation of potential solutions
- **Quickly narrow your options down to a short list** of candidates

The first section of this guide is focused on helping you clarify your strategic goals for a Guided Selling system.

The second section is a straightforward discussion of the key characteristics you probably want to look for in a Guided Selling system.

The final section provides additional ideas to help you start your search and to perform the final evaluation of your ‘short list’ candidates.



Section 1:

Setting Your Goals for a Guided Selling System

Like any important project, the critical first step is to identify and gain consensus on your goals. A good Goal Statement will outline your specific process improvement objectives so you can clearly identify the software features you will need to help achieve them.

Business Performance Goals

The ultimate goals of a Guided Selling system are to increase sales, reduce cost, and reduce risk. A typical set of operational objectives to support this goal would be:

- **Capture product knowledge** in the form of maintainable rules, tables, and formulas to drive the guided selling process. By doing so, also protect your company from the risk of losing this knowledge.
- **Streamline the selling process** – i.e. reduce sales rep time and effort, as well as excessive need for additional resources such as engineering and sales management, and lag time waiting for answers from ‘the experts’.
- **Standardize and automate key steps** like product selection, configuration, and pricing to reduce errors, improve consistency, and speed training for new sales reps and channel partners
- **Simplify the process of disseminating product and pricing information** – i.e. remove the need to create, distribute, file, find, and use paper information or disparate electronic tools. Ideally, make it automatic that sales people are using the latest information every time they work on an opportunity

The following table is an example of how you might document your company’s specific process improvement goals. This will provide the foundation for your business case. Then as you review the capabilities of various software packages, you can step back and compare how well each solution will, in fact, help you achieve your stated goals. This should be the basis of your ultimate evaluation.

| GOAL | SPECIFIC OBJECTIVES |
|--|---|
| Capture product knowledge <ul style="list-style-type: none"> • Reduce risk of reliance on individuals • Provide basis for automation and consistency | Capture critical information such as tables, formulas, and rules used in product selection, configuration, and pricing in a maintainable electronic format. |
| Make every sales rep and channel partner a ‘product expert’ <ul style="list-style-type: none"> • Reduce configuration and pricing errors - ensure accuracy and consistency • Reduce the need to use sales engineering or other resources • Speed training | Using the captured product knowledge, intuitively guide sales people through the entire quoting process in a way that: <ul style="list-style-type: none"> • Makes it easy to follow the proper steps in the proper sequence • Ensures that the latest product information is always used • Ensures that only manufacturable products are defined • Ensures accurate pricing • Enables them to work interactively with a customer if/when appropriate |

continued...

Goals Table continued...

| <i>GOAL</i> | <i>SPECIFIC OBJECTIVES</i> |
|---|---|
| <p>Streamline the overall quoting process</p> <ul style="list-style-type: none"> • Reduce cycle time (speed customer response) • Improve productivity; increase the number of opportunities a rep can handle • Reduce selling cost | <p>Reduce the time and effort required for sales people to:</p> <ul style="list-style-type: none"> • Find the latest product information • Determine the product that best matches a customer's needs, environment, performance criteria, etc. • Select the product features, options, dimensions, etc. that will effectively customize the base product for the customer's specific needs • Develop an accurate price quote • Create a complete proposal package • Convert an accepted quote into an order |
| <p>Improve win rates</p> | <p>In addition to removing time and errors from the quoting process, help sales reps consistently deliver better proposals:</p> <ul style="list-style-type: none"> • Generate proposals and supporting materials that effectively present the product • Provide the customer with associated deliverables that make life easier for them, such as drawings, CAD models, etc. |
| <p>Increase average deal value</p> | <p>Help sales people consistently leverage up-sell and cross-sell opportunities:</p> <ul style="list-style-type: none"> • Automatically prompt sales reps to suggest top-of-the line products and options along with their relative benefits • Automatically prompt sales people to ask customer if they would like appropriate accessories, related products, upgrades, extended warranty, etc. • If appropriate, include similar prompts in proposal documents |
| <p>Improve sales visibility</p> <ul style="list-style-type: none"> • Continuously improve the sales process • Better predict demand | <p>Provide information that goes beyond what is provided by CRM; e.g.:</p> <ul style="list-style-type: none"> • Ability to analyze quote success (win/loss) correlation with specific options, features, etc. • Better information for demand forecasts at the option/feature level. |
| <p>Make your company 'easy to do business with'</p> <ul style="list-style-type: none"> • Recruit premier channel partners • Build repeat business • Retain best sales people | <p>Leverage the above objectives to:</p> <ul style="list-style-type: none"> • Make your products easier for channel partners to sell than the competition's • Make your products easier for end customers to buy than the competition's • Avoid customer and sales channel frustration by eliminating product configuration and pricing errors that must be later corrected (i.e. get it right the first time) |

Section 2:

Performing an Effective First Level Software Evaluation

Once you know the specific process improvements that can lead to the goals of increased sales, reduced costs, and reduced risk, you can develop a good idea of what capabilities you are looking for in a Guided Selling software system to facilitate those improvements. In general, the system needs to provide:

- **The flexibility to handle your:**
 - Products
 - Pricing
 - Sales process
- **The ability to integrate with your:**
 - Enterprise Resource Planning (ERP) system or other existing order processing, manufacturing, and financial systems
 - Customer Relationship Management (CRM) system
 - Engineering systems such as Computer Aided Design (CAD) and Product Lifecycle management (PLM)
- **A level of intuitiveness that will enable your sales reps and channel partners to rapidly:**
 - Learn the system
 - Use it on a daily basis
- **A system management environment that will enable you to ensure:**
 - Performance
 - Availability
 - Up to date information

This much is fairly obvious. What may not be so clear is the set of software design characteristics that enable a Guided Selling system to best fulfill these needs.

Every software supplier has a long list of functional and technical features. They are important and you will need to take the time to fully understand them through demonstrations, Q&A, and reference contacts before you make your final selection. But you cannot afford to do this level of detail evaluation on more than a couple of solutions.

The tables on the following pages provide a succinct outline of key characteristics you can look for right away in your preliminary reviews to quickly narrow down your list. This way you should only need to perform a detail review of 1-2 products instead of a dozen or more.

Software Characteristics Table

The table below briefly outlines each software solution characteristic, why it's important, and what to look for.

| SOFTWARE CHARACTERISTICS | WHY IT'S IMPORTANT | WHAT TO LOOK FOR |
|--|---|---|
| <p>Built around a very flexible product selection & configuration engine</p> | <p>In order to meet your business objectives (streamline, make every rep an expert, etc.) you want your new solution to guide as much of the process as possible. If the engine is unable to handle important aspects of your products it will dilute those benefits.</p> <p>Your products and markets may change over time and you will want to be able to respond within the capabilities of the tools you chose today.</p> | <ul style="list-style-type: none"> • The ability to use a combination of rules, constraints, tables, and formulas in product models to optimize performance and ease of use • Selection capabilities such as: attribute/requirement questions, results filtering, and match ranking • Configuration capabilities such as: multi-level configuration, information links and applets, dynamic presentation of options based on previous selections, global options for rapid configuration and mass change, 'exits' for custom programming • The ability to vary allowed features or options based on who is doing the configuration (e.g. end customer vs. dealer, vs. expert sales rep) |
| <p>Very flexible configuration-driven pricing</p> | <p>The goal is to automate as much of the process as possible in order to eliminate any non value-added steps in the sales process</p> | <ul style="list-style-type: none"> • Calculations that can use just about any combination of table lookups, discounts, multipliers, margins, and markups • Ability to calculate list price, discounted price, dealer cost, and/or any other price/cost view you need. • Ability to handle special requests |
| <p>Multiple product visualization options</p> | <p>Sometimes 'a picture is worth a thousand words' when a sales rep or customer is trying to understand an available option or combination of options.</p> <p>Speed will always be a trade-off to detail, so you want options.</p> | <ul style="list-style-type: none"> • The ability to display images associated with available features and options during the selection process • The ability to illustrate a configured product with either: <ul style="list-style-type: none"> o Dynamically selected static images o Dynamically rendered images (e.g. for different colors, materials, etc.) o Dynamically generated 2D drawings o Dynamically generated 3D models |
| <p>Very flexible output generation</p> | <p>The ability to automate the generation of configuration-specific information for proposals and bid packages can:</p> <ul style="list-style-type: none"> • Be a huge time saver • Differentiate your proposal and win more deals <p>The ability to generate configuration-specific manufacturing information can dramatically speed production and delivery</p> | <ul style="list-style-type: none"> • A flexible back-end generation process that can be customized to drive Parametric 2D or 3D CAD models, images, or document templates for: <ul style="list-style-type: none"> o Proposals, including all of the required sections and attachments such as terms and conditions, warranties, detailed specifications, drawings, etc. o Manufacturing orders, including configuration-specific BOMs, routings, drawings, and other information • Output options for Word, Excel, or PDF |

continued...

| <i>SOFTWARE CHARACTERISTICS</i> | <i>WHY IT'S IMPORTANT</i> | <i>WHAT TO LOOK FOR</i> |
|--|---|--|
| <p>Designed to easily integrate with existing business, manufacturing, and engineering systems</p> | <p>You want a new selling system, not an entire new business system, but...</p> <p>You want to utilize existing customer and product information, and...</p> <p>You want orders to flow smoothly into your existing systems</p> | <ul style="list-style-type: none"> • Built-in Enterprise Application Integration (EAI) capabilities that make it easy to synchronize data and automate transactional flow • APIs, web services, or other tools that make it easy to integrate the core configuration engine into other applications you may have in order to provide consistent configuration across all business processes. |
| <p>Intuitive and easy to use for sales people</p> | <p>You need your sales people and channel partners to be able to quickly learn the system with minimal formal training</p> <p>You need sales people to want to use the system because it makes their jobs easier</p> | <ul style="list-style-type: none"> • Familiar web browser-based user interface • The ability to tailor the 'look' and flow of the process to be as familiar as possible. • The ability to build in tools such as hints, information links, calculators, etc. if/as needed • The ability to use static and dynamic images to make the process as visual as possible |
| <p>A proven technology platform and software architecture</p> | <p>Systems developed on outdated and/or proprietary technology may not be supported over the long term and/or may not be compatible with your other information solutions.</p> | <ul style="list-style-type: none"> • Widely accepted industry standard technologies that will be supported in the future and are compatible with other information technology solutions you have already invested in. |
| <p>System management capabilities that ensure performance, scalability, availability, etc.</p> | <p>Your Guided Selling system will be an important part of your selling process. You need to be confident in its day-to-day operation in order to get the full benefit</p> | <ul style="list-style-type: none"> • Tools for capacity planning, high availability, and other data center tasks. • The ability to add server capacity incrementally. • Tools for central management of product information with automated synchronization of distributed users |
| <p>Rapid Deployment</p> | <p>Solutions that will involve too many people over too many years to deploy before you start seeing any return can lose sponsorship and ultimately fail before a successful launch.</p> | <ul style="list-style-type: none"> • Look for a system that can be deployed rapidly, in managed phases where you can see a return on your investment in a matter of months vs. years. |

Solution Provider Characteristics Table

The people and company behind the solution you choose may ultimately be as important to your success as the features and functions of the software. This table briefly outlines important software supplier characteristics, why they are important, and what to look for.

| SUPPLIER CHARACTERISTIC | WHY IT'S IMPORTANT | WHAT TO LOOK FOR |
|--|--|---|
| <p>In-depth knowledge of configuration technology ...and its use in real-world selling processes</p> | <p>Configuration and related technologies are key to an effective guided selling solution.</p> <p>Just as importantly, you want a partner that understands the real world of selling and appreciates the value of an intuitive, easy to learn solution.</p> | <ul style="list-style-type: none"> • The people you meet understand: <ul style="list-style-type: none"> ◦ Your business objectives as well as the details of your product configuration process. ◦ The full environment of CTO, ATO, MTO, and ETO manufacturing. |
| <p>Extensive background in ERP, CAD, and CRM systems</p> | <p>Your guided selling system will undoubtedly need to interact with your existing business systems, and possibly with your engineering systems, in order to maintain a seamless flow of information and protect the investments you have already made in your existing systems.</p> | <ul style="list-style-type: none"> • A good understanding of the information flow that is needed between the guided selling system and your other systems • The ability to quickly understand the capabilities of your existing systems |
| <p>A structured approach to implementation, deployment, and support</p> | <p>Introduction of guided selling will have a significant impact on your sales process – you will want experienced guidance and a process you can feel confident in.</p> | <ul style="list-style-type: none"> • A comprehensive project template for configuring, integrating, and implementing the new solution • Ideas and assistance, if desired, with the roll-out to sales people and/or channel partners • A full range of available support resources, including consulting, education, project management, helpline, etc. |
| <p>Track record of customer success and an active customer community</p> | <p>When companies with a wide range of different products have been successful, you can be confident the solution has the flexibility to handle your needs, and that the company has the people to help effectively guide your project.</p> | <ul style="list-style-type: none"> • The willingness to provide you with appropriate customer contacts once you have determined that the solution may be right for your company. • Documented customer success • Customer communications and events that foster interaction among customers |
| <p>A clear customer focus</p> | <p>You want a partner that goes beyond just delivering their standard solution to really working with you to help your company meet your objectives.</p> | <ul style="list-style-type: none"> • A willingness to help with extensions to the standard solution if needed. |

Section 3:

Starting and Completing Your Search

You can find most of the Guided Selling software packages targeted to manufacturers by doing an Internet search with terms like 'guided selling and quoting software'.

A particular Internet resource that provides good information on software products is a site called Capterra (www.capterra.com). You can search their solutions using "Quoting Software" or "Product Configurator Software".

Once you have a 'long list' of candidates, you will be ready to perform your first level evaluation using the process and criteria outlined in this guide. This can be done with a few phone calls, a review of the companies' web sites and literature, and one on-site or interactive online session for an introductory presentation, demonstration, and Q&A period.

At that point you should be able to narrow the list to your top candidates. A good sequence of steps to go through with each of the 'short list' candidates is:

- **A 'requirements assessment'** where each supplier visits your facilities, discusses your products and current selling process, and talks with a variety of people to develop a first-hand understanding of your needs and priorities.
- **An 'overview' presentation and demonstration** where you learn more about the scope, capabilities, and technical architecture of the solutions. As part of this session, ask each supplier to describe how they help customers implementation their software. You may want to follow up this session with additional questions – possibly using an interactive online approach or a conference call.
- **A 'scenario-based' demonstration** session where each supplier demonstrates how you would handle key aspects of your product and process with their solution and addresses remaining questions. Your original business performance improvement goals should provide a framework for the scenarios you would like demonstrated.

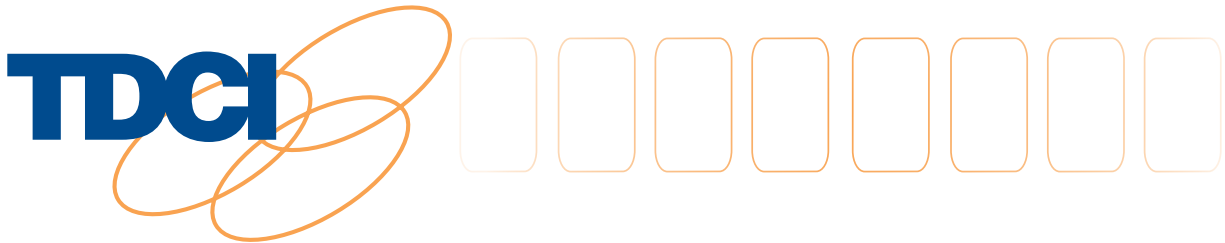
At this point, you should be ready to select a preferred supplier, pending reference checking and formal proposal of prices. The final steps are:

- **Request an 'order of magnitude' proposal** for software and services to verify the total cost is within range
- **Perform a reference contact** with one or two current customers that are most similar to you. Verify what you've been told and get first-hand input from current customers.
- **Request a formal proposal** for specific software licenses and support services.

###

About TDCI

TDCI is a leading provider of guided selling and configuration solutions for manufacturers of a products with a wide range of features, options, and dimensions. Our BuyDesign® solution suite provides innovative Internet-based solutions to support the full interest-to-order cycle for configurable products that are manufactured, assembled, made, or engineered to order. All BuyDesign applications are built around common product configurator and product visualization engines. Core selling applications support quoting, proposing, and ordering functions in a variety of deployment models, while additional applications support end customer interest generation as well as designer specification and requirements capture. For more information, visit www.tdci.com.





TDCI Inc.
8760 Orion Place, Suite 300
Columbus, OH 43240614.781.2325
www.tdci.com